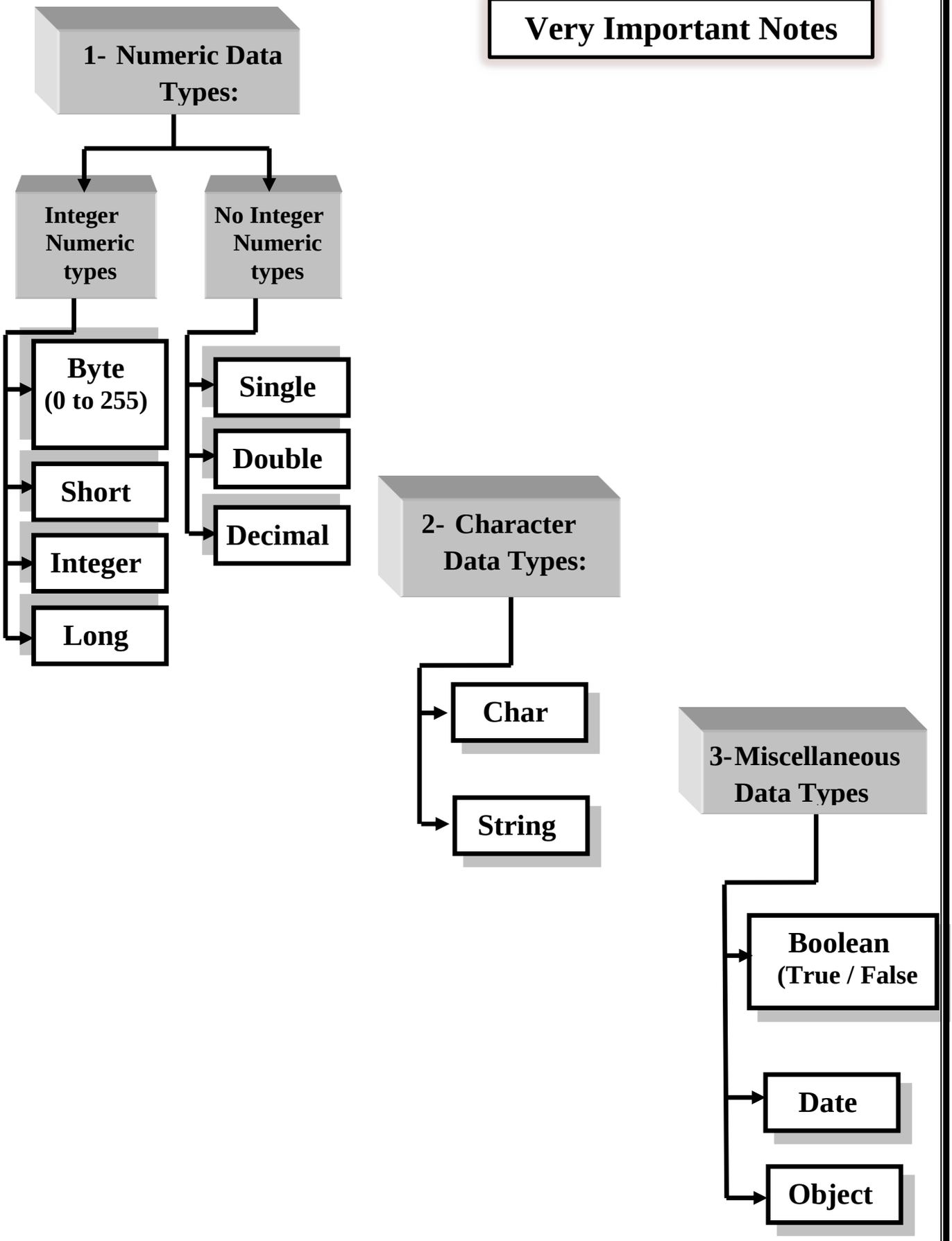
Computer final revision sheet
Prep.3 Second Term

Very Important Notes



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Chapter One: Data

(1) Variables	They are reserved memory locations to store values **temporarily**, these values **can be changed** during the execution of program instructions and commands.
(2)Constants	They are places reserved in the (RAM) and, have data types; this is done during the declaration. These values **cannot be changed** during program execution.
(3) Assignment Statement	Is a statement that **consists of two sides** (right hand side and left hand side) separated by the **assignment operator (=)** ; (This doesn't mean the arithmetic equality). It consists of taking the **value on the right side** of the assignment operator (=) and storing it in the **element on the left** …
(4) Syntax Error	The Error that happens when **writing code incorrectly**.
(5) Logic Error	The Error that leads to **incorrect results when executing the program**; and happens if the **expressions** used in the assignment statement are built **incorrectly**.
(6) Runtime Error	The Error that appears **during the execution**. Occur because of **user input data is incorrect**
(7) &	(**Concatenation Operator**) : The operator that is used to **join** or concatenate two texts …
(8) VbCrlf	It is a reserved word that is used to **create a New Line** …
(9) " "	The two Apostrophes are used while writing or storing **a text**.
(10) # #	The hashes are used while writing **date or time**.
(11) Me	The word that means the **Current Form** …
(12) REM (') Apostrophe	They are used to provides a way to add **comments** that help the reader understand the code written in the (Code Window) , is **neglected** during the program compilation using the (VB.Net)

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Specify the Scope of Declaration for Variables and Constants	
(13) Local	When declaring a Variable or Constant in an Event **it can't be used out of the range of this event** …
(14) Global	When declaring a Variable or Constant on the level of classification of the (Class) . So we don't need the declaration process at each scope of the Event procedure …

Chapter Two: Branching

(1) Conditional Expression	It is a **part of a program code** that its result can be (**TRUE**) or (**FALSE**) • **X > = 50**
(2) If ... Then **(3) If ... Then ... Else**	Used only when you have only ONE Condition … • (**If ... Then**) when you have only ONE choice when the condition is True … • (**If ... Then ... Else**) when there are two alternatives …
(4) Select ... Case	Used only when you have **more than one Conditional** Expression or **more than two possible branches**. • (**Select ... Case**) it is **more effective** when the **branching** depends only on the value of **one Variable**

(5) Mod	It is an arithmetic operator that computes or gives the REMAINDER of the Division operation. • 8 mod 2 = 0 • 9 mod 3 = 0 • 17 mod 9 = 8 • 11 mod 4 = 3
(6) SelectedIndex	It is a property that is used to determine the **index** of the **item** that is **selected** in the **ListBox** or **ComboBox** …
(7) Focus ( )	It is a (**Method**) for the **TextBox** and is used to set the **cursor** focus **inside this TextBox** , to begin the writing … **TextBox1.Focus ( )**

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Chapter Three: Loops and Procedure

(1) Loops	Looping is to repeat a set of statements many times …
(2) For ... Next	It is to repeat a set of statements many times using the (**For…Next**) statement .
(3) Step	Using the (**Step**) keyword, you can **increment or decrement** the counter through the loop; by the value you specify. **If you do not write (Step**) with the(For ...Next) statement , it means that the increment **value is one ; by default**.
(4) Next	The function of **Next** statement in the (For ... Next) loop : **a)** Increase the value of the counter variable with the increment value. **b)** Compare the increment value with the end value of the loop.
(5) Do While ... Loop	The (**Do While ... Loop**) is used to execute statements for an **undefined number of times** This is useful if you do not know the number of iterations • Repeat the code **as long as** condition is (**True**) • Repeat the code **until** the conditional expression becomes (**False**)

(6) Procedure	A set of commands and instructions under a certain name, when you call this name can execute these instructions.

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(7) Sub Procedure

You can declare a Sub procedure in a class; if we had a code that will be repeated in more than one place in this Class;

```
Public Class Form1
    Dim total As Integer

    Private Sub Button1_Click(ByVal sender As System.Ob
        'عرض الأعداد الفردية من 1 إلى 10
        ShowOddOrEven()
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Ob
        'عرض الأعداد الزوجية من 1 إلى 10
        ShowOddOrEven()
    End Sub

    Sub ShowOddOrEven()
        Dim i As Integer
        Label1.Text = ""
        For i = 1 To 10 Step 2
            Label1.Text = Label1.Text & " " & i
        Next
    End Sub

End Class
```

Calling a (Sub) Procedure

Calling a (Sub) Procedure

Declaring a (Sub) Procedure

Code executed when you call the (Sub) procedure

```
Sub ShowOddOrEven(ByVal Start As Integer, ByVal LastValue As Integer)
    Dim i As Integer
    Label1.Text = ""
    For i = Start To LastValue Step 2
        Label1.Text = Label1.Text & " " & i
    Next
End Sub
```

Declaring a Parameter

Using a Parameter

```
Private Sub Button1_Click(ByVal sende
    'عرض الأعداد الفردية من 1 إلى 10
    ShowOddOrEven(1, 10)
End Sub

Private Sub Button2_Click(ByVal sende
    'عرض الأعداد الزوجية من 1 إلى 10
    ShowOddOrEven(2, 10)
End Sub
```

- Calling the procedure (**ShowOddOrEven**)
- Setting an Argument value

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(8) Function	We declare a *Function* if we have a code that returns a value needed in the program
	`Public Class Form5`
	`  Function Sum(ByVal First As Single, ByVal Second As Single) As Single`
	`  Dim total As Single`
	`  total = First + Second`
	`  Return total`
	`  End Function`
	`End Class`
	`Private Sub Button1_Click(ByVal sender As`
	`  Dim x As Single = TextBox1.Text`
	`  Dim y As Single = TextBox2.Text`
	`  Label4.Text = Sum(x, y)`
	`End Sub`

(9) Parameters	In the procedure declaration, we can use more than one Parameter. A Parameter allows the calling code to **receive values**; that **doesn't exist in the procedure** and, unidentified in advance; but specified when you call this procedure.

Chapter "4"
Cyber bullying

1- **Cyber bullying**	Is an intended aggressive behavior using the electronic media to annoy, embarrass, frighten or threaten others.
2- Harassment	It is aggressive messages directed against one or more persons.
3- Anonymity	Means using nicknames to publish threatening comments at the electronic forums and Emails or at other electronic sites.
4- Cyber Stalking	It is a form of electronic harassment where the aggressor frequently traces and chases a particular person in all electronic media.
5- Flaming	It is a publication of hostile and vulgar words against one or more through a media and electronic communication.
6- Outing	It is a dissemination of information about a specific person or more abusively.
7- **Exclusion**	It is to ignore one or more persons through the electronic media.
8- Cyber threats	It is an email or e-message carrying a threat and intimidation to one or more persons

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How to protect yourself from Cyber bullying?

1- Don't share your password with anyone.
2-Make a password that is difficult to predict.
3-Don't publish (post) any private data.
4-Avoid deleting Cyber bullying messages.
5- Don't interview anyone you know via the internet
6- Be careful! Don't send any electronic message when you are angry.
7-Inform your parents with what annoy you when you use the internet.

8-The download of software from the internet should be done under the supervision of your teacher or your parents.

Important Codes ☺

1) Write the code which is used to declare a variable name **"F_Name"** for storing characters :

```
Dim F_Name As String
```

2) Write the code which is used to declare a constant **"A1"** for storing the value **75.32** :

```
Const A1 As Single = 75.32
```

3) Write the code which is used to declare a constant **"D"** for storing the value **15** :

```
Const D As Short = 15
```

4) Write the For statement to show the **Odd** numbers from **11** to **99** :

```
For X = 11 To 99 Step 2
```

5) Write the For statement to show the **Even** numbers from **12** to **99** :

```
For X = 12 To 99 Step 2
```

6) Write the code to print out the variable (**total**) on **Label3** :

```
Label1 . Text = total
```

7) Write the code that declare a place for the value **pi** with a suitable data type , where **pi = 3.14** :

```
Const pi As Single = 3.14
```


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8) Write the code that **set** the **cursor** inside **TextBox1** :

```
TextBox1 . Focus ( )
```

9) Write the code that **empty TextBox1** :

```
TextBox1 . Text  =  " "
```

10) Write the code that **empty ListBox1** :

```
ListBox1.Items.Clear  =  ( )
```

11) Write the code that **Add items to the ListBox1** :

```
ListBox1.Items.Add  =  (Item)
```

Question (1): Put (√) or (×):

1. Each data type has space storage in computer memory (RAM).(√)
2. In (IF) statement the code that follows (Else) is executed when the result of the conditional expression is True).(X)
3. The command Msgbox("3" & "X" & "3") displays a message box containing number 9. (X)
4. The values assigned to variables can be abstract value, variable, property or expression (√)
5. You can call the Procedures only once.(X)
6. To protect from cyber bullying shouldn't be posting any your private data on the Internet(√)
7. The loop which starts with the word (For) ends with the keyword (Next). (√)
8. The (If) statement can be written in one line without writing (End if). (√)
9. Writing comments begins with the word Dim.(X)
10. The Mod operator is used to find the result of dividing two numbers.(X)
11. Sub procedure has a return value.(X)
12. Variable of type Double takes the value true or False.(X)
13. Select Case is when there are more than two possibilities in branching.(√)
14. Do…While…Loop is used to repeat a specific code for unknown number of times based on the specific condition. (√)
15. The Boolean variable is not classified as digital or text data.(√)
16. On performing formula 20 * 6 / (1 + 9) the result is 120.(X)
17. The following words can be used as variable names Single – As – Byte.(X)
18. Variables of types (Integer & Long & Double) are used to store integers only.(X)
19. The assignment operator (=); (which mean the arithmetic equality.(X)
20. The (Select…Case) statement however, it is more effective when the branching depends only on the value of more than two variable. (X)
21. Cyber bullying definition an intentionally aggressive behavior. (√)
22. The symbol (&) is used to separate the Concatenation of texts. (√)
23. Priority rule for arithmetic operation Additions and subtractions then Exponentials.(X)

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24. The number of iterations in the statement (For A = 5 to 9 Step 3) is 3 times.(X)
25. The Sub procedure cannot be used in any assignment statement. (√)
26. In the following statement: Function Asd (Byval A As Single) As Integer. The data type of return value is Single.(X)
27. Exit of the repetition statement Do While…Loop depends on a conditional expression. (√)
28. From the forms of cyber bullying is Cyber Stalking(√)
29. When Step is not written in For…Next statement, this means that the increment value is set to zero by default. (X)
30. The property that refers to the selected item ListBox tool is SelectedIndex.(√)
31. The comparison operator (< >) means equality.(X)
32. Syntax errors lead to incorrect results when the program is run.(X)
33. In For…Next statement the rate of increment can be determined of the counter using the keyword Step (√)
34. To input numeric data containing fractions use integer data type. (X)
35. A protection guideline of the Cyber bullying is to set a password that can be deduced. (X)
36. The declaration statement of the variable Name that contains the value "Yousef" is (Dim Narne As "Yousef").(X)
37. If the value of the start is greater than the value of the end in the repetition statement "For/Next", the increment value will be negative. (√)
38. Outing of others through the internet is considered one of the cyber bulling forms. (√)
39. X + 1 = X is an assignment statement.(X)
40. (**First_Name**) is a valid variable name. (√)
41. Variables can be assigned the value during declaration or at a later stage. (√)
42. User inputs can be received through many tools, including (TextBox). (√)

Question (2): Write the scientific term:

1) A reserved word in visual basic.net used to create a new line, [**vbcrlf**]
2) A set of commands and instructions under a certain name, when you call this name can execute these instructions. [**Procedure**]
3) Part of the program code, its result can be (True) or (False) depending on the value of a property or a variable or another piece of data in the program. [**Conditional expression**]
4) [**Parameters**] are used to receive values from out of the procedure and are known only when the procedure is called.
5) [**Sub**] is never used in the assignment statement
6) A statement used to repeat a certain code for unknown number of times based on a specific condition. [**Do While**]
7) It leads to incorrect results when executing the program [**Logical error**]
8) They are places reserved in the (RAM) and, have data types; this is done during the declaration: These values cannot be changed during program execution. [**Constants**]

Question (3): (A) Choose the correct answer using the following words:

(Sub Procedure – VbCrLf – Do While…Loop – Long)

1. **VbCrLf** symbol used to create a new line.
2. **Sub Procedure** doesn't return any value while Function returns a value.
3. **Do While…Loop** statement is used if the number of iterations is unknown.
4. Variable of the type **Long** is used to store the integer numbers.

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Question (4): Complete the Following sentences using the Following words:

(E-mail – Constants – Select Case)

1. One electronic media used in Cyber bullying is **E-mail**
2. **Select Case** statement is used if there are more than two possibilities of branching.
3. **Constants** are places reserved in computer memory to store a value that does not change during the program runtime.

Question (5): Put the suitable word in the space:

(Variables – Focus – Sub - Dim)

1. To declare a text variable named Name we use word **Dim**
2. We declare **Sub** in case that we have a (Code) that will be repeated in more than one place within the Class.
3. **Variables** when naming, you must note that the name begins with a letter.
4. **Focus** is used to set the cursor inside the TextBox.

Question (6): Choose the correct answer for the following:

1. In the (Select – Case) statement the variable's value can be set after …… (Select - **Case** – Case else – End)
2. The result of the Arithmetic expression (3 * 4 + 2) is …… (**14** – 20 – 18 – 30)
3. The property that determines the selected item in a (ListBox) is …… (Items - **SelectedIndex** - Text - Name)
4. The values that will be received when calling the procedure which is used in the code are …… (Function - **Parameters** - Events - If)
5. The command MsgBox ("3" & " x " & "3") displays a message box containing …… ("3" & " x " & "3" – **3 x 3** – 9 – 6)
6. The data that is entered to the computer are stored in …… (**Ram** – Rom – Hard Disk)
7. The output of the following equation: 2 ^ 2 * (4 +2) * 3 + 14 / 2 is …… (61 – 64 – **79**)
8. An optional element in For…Next statement …… (Counter – **Step** – End)
9. To end the repetition statement when the condition A < > 2 is true; its beginning is written as follows: …… (Do While (a < > 2) – Do While (a < 2) or (a > = 2) – **Do While (a = 2)**)
10. To transfer cursor inside the TextBox tool we use the method …… (IsNumeric( ) – Text – Rem – **Focus( )**)
11. When the value (265) is stored in a variable of type Byte the resulting error is of the type …… (**Runtime** – Logic - Syntax)
12. If the value of property Interval is 50000 milliseconds, then the time will be …… (**50** – 5000 – 5 – 0.5) seconds
13. When Step is not written in the For…Next statement then the increment will be by …… (**1** – zero – "" – None of the previous)
14. To use the variable in all procedures it is declared once on the ……. level (**Class** – Procedure – Function – Constants)
15. The result of conditional expression (Degree> = 70) is …… (Nothing – **false** – True) if the value of the variable (Degree) is less than 70.
16. We can programmatically control the start and stop of the Timer by changing the property …… (Timer – Interval – **Enabled**)
17. We declare …….. (Sum – Function – **Sub**) if we have a code that will be written in more than one place in the Class.

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18. Assume there is a function with name AddSum ( ); which of the following expressions is not correct when it is called …… ([**AddSum ( ) = X + Y**] – [Y = AddSum ( )] – [X = AddSum ( )] – [X = Y + Addsum ( )])
19. …… is an aggressive behavior using electronic media, for the purpose of harassment, annoyance, embarrassment, intimidation or threatening others. (**Cyber bullying** – e-commerce – electronic forums – e-mail)
20. To store the student gender male or female, use a variable of type …… (Date – String – Single – **Boolean**)
21. The purpose of using Do While…Loop statement is:
    - Repeat Code until the conditional expression becomes True .
    - **Repeat code as long as the condition is True.**
    - Repeat code as long as the condition is False.
22. In the For…Next statement what is the function of Next?
    - Increment the value of the counter by the value of the step.
    - Compare the increment value with the end value.
    - **All of the above.**
23. The Best repetition statement used when the number of repetitions is known is:
    - Do…While.
    - **For…Next.**
    - Select…Case.
24. The means that can be used in cyber bullying through the internet are ……
    (e-mails – chats – blogs – **all of above**)
25. The Procedure in the Class is declared once while it can be called ……
    (only once– two times – **any number of times** – none of the above)
26. Variable of type …… stores values from (zero) to (255). (Boolean – **Byte** – Short)
27. To end the iterative loop when the condition A = 2 its beginning is written as follows …… (Do…While (a = 2) – Do…While (a < 2) Or (a > = 2) – **Do…While (a < > 2**))
28. To store the numeric values containing fractions use variable of type …… (**Single** - Short - Integer)
29. The purpose of using of Do While…Loop statement is to repeat the code as long as the condition is …… (False – **True** – none of the previous)
30. Use the statement For…Next to change the value of the counter X to display the even numbers from 2 to 100 …… (For X = 2 : 100 Step 2 – For X 2 to 100 Step 2 - **For X = 2 to 100 Step 2**)
31. To open the code window press the …… key of the keyboard (**F7** – F5 – F4)
32. …… is a form of electronic harassment, but frequently (**Cyber Stalking**– Cyber Threats – Flaming)

Question (7): (A) corrected the error in the following codes:

1. Din X As Single	**Dim**
2. Const BirthDate As Date = 25/1/2011	**#25/1/2011#**

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Q.(8) What is the value of the variable (R) after executing the following code:

```
Dim R As Integer = 10
 Do While R < 10
    R = R + 1
Loop Label1.Text = R
```

10

Question (9): Complete the fo1lowing sentences with the suitable words:

1) **Parameters** are used as a way of receiving unknown values from out of the procedure and are set when the procedure is called.
2) Set the counter values of: For N = **7** To **21** step **7** so that the output will be (7 – 14 – 21)
3) The output of the conditional expression (10 >= 10 Or 20 > 30) is **True**
4) In the following code: Function Sum (ByVal X As Single) As Integer ; the type of the return value of the function Sum **Integer**
5) Procedures in Visual Basic language, either to return with a value such as **Function** or don't return with a value such as **Sub**
6) Dim is used for declaration of **Variables**
7) The number of possible selections with the If…Then…Else statement is …**2**……
8) Repetition statement begins with keyword (For) and ends with the keyword **Next**
9) If the value of the property Interval of Timer tool is set to 3000 then this means **3** seconds
10) different values are stored in the computer's memory **RAM** in certain representation that varies according to the type of these values
11) **Assignment Statement** is a statement of two sides with the assignment operator (=) between them.
12) **Do While … Loop** is used to repeat a specific code for unknown number of times it based on the specific condition.
13) The sign ……**&**…… is used to join texts.
14) The purpose of using Do While…Loop is to repeat a code as long as the condition is **True**
15) **Me** refers to the current Form window.
16) Miscellaneous Data Types are those data that; do not fall under the Numeric or the Character types **Boolean** and **Date**
17) The best Loop used when you know in advance the number of iterations **For … Next**
18) **Constants** are reserved memory locations with values assigned on declaration only.
19) The comment line notes in the code window begins with the symbol ' or the keyword **Rem**

Question (11): Choose from column (A) what suits from column (B):

(A)		(B)
1) Not to publish private information on the Internet.	**(4)**	a) Syntax Errors
2) Used in declaration of variables.	**(1)**	b) Help protect against cyber bullying
3) Be useful in the branch when depends on one variables only.	**(2)**	c) Dim
4) An error occurs due to type the code incorrectly.	**(3)**	d) Select…case

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Question (12): Match from column (A) to the suitable of column (B):

(A)	(B)	
1. Sub procedure	**(4)**	a) Their values assigned only when declared.
2. Function	**(1)**	b) Is used when repeating specific code in the program more than once.
3. Variables	**(3)**	c) Their values assigned when declared or during the program runtime.
4. Constants	**(2)**	d) Is used when there is a code that will give a value to be used in the program.

Question (13): Arrange the following lines according to the priorities of the operations:

Rank	Process
(3)	Multiplication and division from left to right.
(1)	Parentheses from inner to outer.
(4)	Addition and subtraction from left to right.
(2)	Exponentiations.

Q. (14) Find the result of the following codes, using the results in front of each code:

N	Code	Result of code
1	Dim r As Single = 0.5 Do While r >1 R = r + 0.5 Loop MsgBox(r)	(1 – 1.5 – **0.5**)

2	Dim A As Integer = 15 If
	A Mod 3 = 0 then
	Label1.text = “True”
	Else
	Label1.text = “False”
	EndIf
		(**True** – False – 15)

3	Dim r sum as integer For r = 5 To 10 sum = sum + r Next Msgbox(r)	(11 – 5 – **10** – Overflow)

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Q. (17): Extracted from the following code:

```
Function Area (Byval Radius As Single) As
    Single Const X As Single = 22/7
    Dim res As Single
    Resume = x *
    Radius ^ 2 Return
    Res
End Function
```

a. The name of the procedure: **Area**
b. Return value: **Res**
c. The data type of the function: **Single**

Q. (19): Write the result of the following calculations:

1. 3 * (3 + 4) = ……**36**……
2. 3 * 3 + 4 = ……**13**……
3. 5 + 3 ^ 2 / (9 / 3) = …**8**……

Q. (20): Write the For…Next statement when the value of the variable (I) is:

End = 5 Start = 25 Step = -5

```
For I = 25 To 5 Step -5
Next
```

School Book Questions

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Chapter (1)

Q.1: Put (√) or (X)

1. One of the advantages of VB.NET is dealing with different types of data. (√)
2. One of disadvantage of VB.NET is dealing with different types of data. (X)
3. All the data entered into the VB.NET program language are stored temporarily in the computer memory. (√)
4. All types of data saved in the memory occupy the same storage space. (X)
5. A good programmer is the one who improves the rationalization of storage space in the computer memory. (√)
6. The value of the student's total grades is classified within the **integer** data types. (X)
7. The value of the student's name is classified in the **Miscellaneous** data types. (X)
8. The value of the student gender "male" or "female" is classified within the **Miscellaneous** data types "**Boolean**". (√)
9. Image of a student can be classified within the character data types. (X)
10. The value of the employee's salary can be classified within non integer numeric data types. (√)
11. Each data element stored in computer memory occupies a particular storage space and a particular range of values according to its data type.(√)
12. The data element identifies the storage space it occupies in computer memory and knowing the minimum and the maximum for its value. (√)
13. The term variables in vb.net means stores in the computer memory which has type and name. (√)
14. Declaring a variable in VB.NET means determining its name and data type. (√)
15. The declaration of variables in the language VB.NET helps rationalize the use of the computer memory. (√)
16. Declaration of variables is a matter of formality, because VB.NET languages recognize the variables and determine the type automatically. (X)
17. The following statement "**Dim F_name As String**" is to declare the name of a variable "**String**" and type "F_**name**". (X)
18. The following data element "**Dim F_name As String**" is to declare the name of a variable "**F_name**" and type "**String**". (√)
19. The declaration statement for variables is determined by the variable name and type.(√)
20. The declaration statement for the variables is determined by the name, type and fixed value. (X)
21. "55City" variable name is a consider a wrong variable name because it begins with a number. (√)
22. "55City" is considered a variable correct name. (X)
23. **Name**" is considered a wrong variable name because it is a reserved word.(X)
24. "**Name**" is considered a correct name of a variable because it is made up of letters.(√)
25. "**Dim**" is used to declare variables. (√)
26. "**Dim**" is used to declare constants. (X)
27. The command "**Const**" is used in the declaration of the variables. (X)
28. The command "**Const**" is used in the declaration of the constants .(√)
29. Constants in VB.NET language are stores of a computer memory which have the name

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and the value that does not change during the running of the program.(√)

30. Constants in VB.NET language are stores of a computer memory which have name and value can change during the running of the program. (X)
31. The error in the result of any equation is a Syntax Error. (X)
32. The error in the result of any equation is a Logical Error. (√)
33. Error that appears while you run or execute a VB.NET program is called Syntax Error. (X)
34. Error that appears during the execution of VB.NET program is Run time Error.(√)
35. The final value of the variable X after the execution the following equation "X = 3 + 2 * 4" is (11).(√)
36. The final value of the variable X after execution the following equation "X = 3 + 2 * 4" is (20). (X)

Select the appropriate answer to complete each of the following sentences:

(1) The value of prices of desktop tools can be classified as…….. data.
a) integer **b) non- integer** c) miscellaneous

(2) The value of the names of the subjects can be classified as …… data.
a) miscellaneous b) non- integer **c) string**

(3) The type of data element temporarily stored in the computer memory defines:
a) storage space and the extent of its value
b) name and storage space
c) storage space and a storage value

(4) The right syntax to declare Salary variable is ……
a) Dim Salary As Integer **b**) Dim Salary As Byte **c)Dim Salary As Decimal**

(5) The right syntax to declare the city variable is …… .
a) Dim City As String **b)** Dim City As Byte **c)**Dim City As Decimal

(6) The right syntax to declare the variable name F_Name is ……. .
a) Dim F_Name As Integer **b)Dim F_Name As string** c)Dim F_Name As Decimal

(7) The right syntax to declare the variable Gender is …… .
a) Dim Gender As Decimal b)Dim Gender As Integer **c)Dim Gender As Boolean**

(8) The right syntax to declare the variable name F_Name is ……. .
a)Din F_Name As String **B)Dim F_Name As String** C) Dim F_Name As Char

(9) The error that appears after running a program VB.NET language is called ……. .
a) Syntax Error b) logical Error **c) Runtime Error**

(10) The error that appears while writing a code in a VB.NET language called…….. .
a) Syntax Error b)Logical Error c)Run time Error

(11) The error in the output result in language VB.NET code is called……. .
a) Syntax Error **b)Logical Error** c)Run time Error

(12) The final output of the variable X for equation "X = 3 + 2 * 4" is …….. .
a) 11 b) 24 c) 20

(13) The final output of the variable Y for the equation "Y = 16 - 12/4 + 2" is …15.
a) 3 b)11 **c)15**

(14) The declaration statement of a variable "Dim X As String", means the declaration about ….. .
a) A variable named X and type of character String.
b) Variable called string and its type X.
c) Unknown variable has no name and its type String.

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(15) The correct statement to declare a non-integer variable named Y is ….. .

a) Dim Y As Decimal b)Y As Decimal c)Dim Y = Decimal

(16) Choose the correct name of the variable "name of the student":

a) st_name b)st name c)Name**

(17) Choose the correct name of the variable "address of the employee":

a) 5Cairo **b)E_Address** c) (Address)

(18) The names of the following variables are correct in level of class form1 except: (enrichment)

a) St_text **b)Text** c)_st_text

(19) On declaration of a mathematical constant π , we use the code …… .

a) Dim Pi As Single b)Dim Pi As Single = 3.14 **c)Const Pi As Single = 3.14**

(20) On the declaration of constant gravity acceleration, we use the code …… .

a) Dim g As Single **b)Const g As Single = 9.81** c)Dim g As Single = 9.81

(21)The declaration of variable number of family members C_Family with initial value of 2 is:

a) Dim C_Family As Single = 2

b) Const C_Family As Integer = 2

c) Dim C_Family As Integer = 2

(22) If there is an error in the result of a rectangular area calculation in a program, this error is considered …. .

a) Syntax Error **b) Logical Error** c) Run time Error

(23) The error message that appears when you write the code "Dimension X As Byte", can be classified as ….. .

a) Syntax Error b) Logical Error c) Run time Error

(24) The final output of the equation " Y = 12 – 2 + 4 / 2 " is …….. .

a) 12 b) 7 c) 9

(25) The final output of the equation " Y = 12 – (2 + 4) / 2 " is ……. .

a) 12 b) 7 **c) 9**

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Chapter two
Questions

(1)Answer the questions with the help of the following code:

```
If X >= 50 Then
Msgbox("successful ")
End if
```

A- Messagebox is shown with the text "successful" when :

X>=50

B- If the value of X equals 50, the result of executing code is

successful

C- If the value of X equals 62, the result of executing code is

successful

(2) Answer the following questions with the help of the general syntax of the IF …. Then" statement:

If Condition Exception Then Code (1) Else Code (2)

A- Write conditional expression testing the value of the variable Y if it is less than 0.

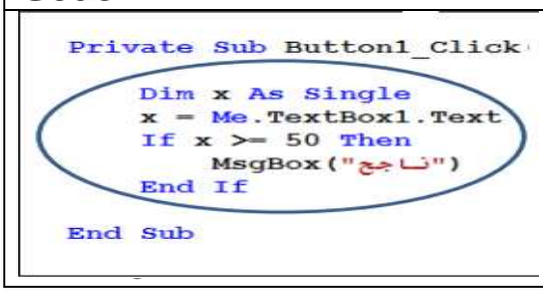
If Y< 0 Then

B- Replace the "Code 1" in the general syntax with a code that shows the text "a negative number" in the message box.

If Y< 0 Then Msgbox(“negative number”)

C- From the general syntax of statement (If .. Then .. Else) that if the conditional expression is true, then **code1** is executed and if the expression is not achieved, then **code2** is executed. (Complete)

(3) Answer the following questions with the help of the screen and the code in the table:" Code screen

Code	Screen
	

A. The purpose of the program is:

When we enter student’s score then the message box “successful “ appear if the score is greater than or Equal to 50

B. The code is executed if the event **Click** occurred on **Button1** control tool.

C. Type of variable X in the code is **Single**.

D. "Me." In the code refers to **current form**.

E. We input the value (50) in the text box, the result of the implementation of the code is: “**successful**”

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(4)Complete the following table with the required code, using the general syntax conditional statement "IF .. Then .. Else"

```
If Conditional Expression Then
        Code
Else
        Code
End if
```

So as to show a message box having the word "مصر "if the value of the variable "Country" is equal to the "Egypt" or message box having the word "Egypt" appears:

No	statement	code
1.	Conditional expression	**If Country = "مصر" Then**
2.	Result of achieving the condition "True"	**Msgbox("مصر")**
3.	Result of not achieving the condition "False"	**Msgbox("Egypt")**

(5) Answer the following questions with the help of the code:

```
Dim x As Single
x = Me.TextBox1.Text
If x >= 50 Then
    MsgBox("ناجح")
Else
    MsgBox("راسب")
End If
```

A. If the value of X = 76, the result of executing the code is:

Msgbox("ناجح ")

B. If the value of X = 49, the result of executing Code is :

Msgbox("راسب ")

C. Rewrite the code of "Block If" to appear on only one line.

If x >=50 Then Msgbox ("ناجح") Else Msgbox("راسب")

(6) After studying the code, answer the following questions:

A- Modify the code so that the "الرقم الزوجى"text appears in a label "Label2" and "الرقم الفردى "text appears in a label " Label2" instead of the message box.

```
Dim N As Long
N = Me.TextBox1.Text
If N Mod 2 = 0 Then
    MsgBox("الرقم زوجي")
Else
    MsgBox("الرقم فردي")
End If
```

Label1.text = "لرقم الزوجى"

Label2.text = "الرقم الفردى"

B- Replace the type of variable "N" to be "Integer"

Dim N as integer

(7) The following code receives any number of a TextBox, and stores it in a variable, and then tests its value. If the number is even or odd, a Messagebox appears showing that. Required: Retype the code after discovering the errors and correcting them so that the result of its implementation is right

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Dim X As Integer
N = Me.TextBox1.Text
If N Mod 2 = 0
MsgBox ("الرقم زوجي")
Else
MsgBox ("الرقم فردي")
	Dim **X** as integer
	X= me.textbox1.text
	If x mod 2 =0 **Then**
	Msgbox("لرقم الزوجى")
	Else
	Msgbox("الرقم الفردى")
	End If

(8) After studying the following code, answer the following questions:

```
Private Sub Button1_Click(ByVal sender As Syste
    Dim degree As Single
    Try
        degree = Me.TextBox1.Text
        Select Case degree
            Case 0
                Me.Label2.Text = "صفر"
            Case Is < 0
                Me.Label2.Text = "تحت الصفر"
            Case Is > 0
                Me.Label2.Text = "فوق الصفر"
        End Select
    Catch ex As Exception
        MsgBox("ادخل عدد")
        Me.TextBox1.Focus()
        Me.TextBox1.Text = ""
    End Try

End Sub
```

(A)The purpose of the code is **Test a number of temperature parameters If it is equal to "0", the text "صفر"Inside the Label2 tool, If the number is less than (0), the text "تحت الصفر" appears, If the number is more than (0), the text "فوق الصفر" appears, Additionally, this program prevents an error from occurring if a non-integer value is entered inside the TextBox1, will display message " أدخل العدد".**

(B) If you learn that: " Degree = -3" the text appears in the message box is : **تحت الصفر**

(C) The code is executed when the event **Click** occurs on control tool **Button1**.
(D) Type of variable "Degree" :is **Single**..

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Chapter (3)

(1)Answer the questions with the help of the following code:

```
Private Sub Button1_Click(By'
    Dim M As Integer
    For M = 1 To 3
        MsgBox(M)
    Next
End Sub
```

A-The code is executed when you press **Click** on control tool **Button1**. (complete)
B- **"Dim"** is used to declare (**variable** – constant) with type **Integer**.
C-The variable name used in the iterative loop is: **M**
D. The starting value of the iterative loop is **1** , the end value is **3** and the value of increment is **1**
E. Implementation of the iterative loop stops when the value of variable M reaches **4**
F- The code that is repeated is. **MsgBox (M)**

(2) Answer the following questions with the help of the following code,:

```
Private Sub But_Repeat_Click (ByVal sender As System.Opject,
Dim m As Integer
Me.Lebel1.Text = ""
For m = 5 To 9 Step 2
Me.label1.Text = Me.label1.Text & m & vbCrLf
Next m
…… (The required in line number 7)
MsgBox ("البرنامج انتهى ")
End Sub
```

(A)The purpose of the code is:

Display the odd numbers from 5 to 9.

(B) The code is executed when the event **Click** occurs on the control tool **But_Repeat**.
(C) To declare the variable m , the command **Dim** is used.
(D) The loop statement used is **For … Next**.
(E) The code to be repeated is **Me.label1.Text = Me.label1.Text & m & vbCrLf**.
(F) The purpose of the use of concatenation operator & in the statement (Me.label1.Text = Me.label1.Text & m) is. **Link the values before and after the parameter & make it a one value.**
(G) Type the necessary code to display the final value of the variable M after the execution of the iterative loop in a message box:

MsgBox (M)

(3) Answer the following questions with the help of the code:

```
Dim n, product As Integer
Dim str As String
Me.TextBox1.Text = ""
For n = 1 To 12
Str = 3 & " × " & n & " = "
product = 3 * n
Me. TextBox1.Text = Me. TextBox1.Text & str & product & vbCrLf
Next n
End Sub
```


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A- The purpose of the code is

Display the multiplication table for number (3).

B. The purpose of the code (Dim str As String) is to declare a string variable named str. **(True - false)**

C- The purpose of the code (product = 3 * n) is assigning the result of multiplying 3 by the variable n to the variable product. **(True - false)**

D- The purpose of the code (product = 3 * n) is assigning the result of multiplying 3 by the variable product to the variable n. **(True - false)**

E.The purpose of the code:

Me.TextBox1.Text = Me.TextBox1.Text & str & product & vbCrLf

is assigning the value of the string variable "str" and the value of the variable "product" as a value for the property "text" for TextBox1. (True - false)

F. The purpose of the code part "vbCrLf" is to transition to a new line. (True - false)

(4)The following code is for typing a multiplication table of number 4 from 1 to 12.

Required: Modify the code to have a multiplication table of (7) so that the result will be in a TextBox.

7 × 5 = 35
7 × 7 = 49
7 × 9 = 63
7 × 11 = 77

```
Dim n, product As Integer
Dim str As String
Me.TextBox1.Text = ""
For n = 1 To 12
Str = 4 & " × " & n & " = "
product = 4 * n
Me. TextBox1.Text = Me. TextBox1.Text & str & product & vbCrLf
Next n
End sub
```

```
Dim n , product As Integer
Dim str As String
Me.TextBox1.Text = ""
For n = 5 To 11 Step 2
str = 7 & " × " & n & " = "
product = 7 * n
Me. TextBox1.Text = Me. TextBox1.Text & str & product & vbCrLf
Next n
```

(5)The purpose of the following code is to type a multiplication table of (9) by the numbers from 1 to 10.

Required: Correct the four errors in the code, until we get the correct result of the code execution in the table.

```
Dim n, product As String
Dim str As String
Me.TextBox1.Text = ""
For n = 1 To 10 Step -1
Str = 9 & " × " & n & " = "
product = 9 + n
Me. TextBox1.Text = Me. TextBox1.Text & str & product & vbCrLf
Next str
End Sub
```


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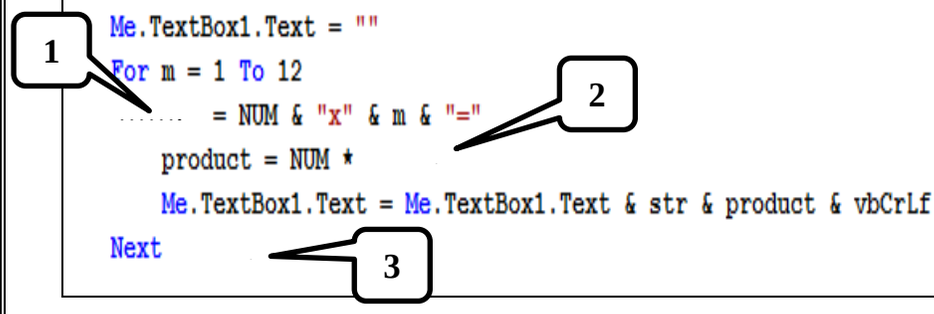
No.	Wrong code	The code after correction
1	Dim n, product As String	Dim n , product As Integer
2	For n = 1 To 10 Step -1	For n = 1 To 10
3	product = 9 + n	product = 9 * n
4	Next str	Next n

(6) The following table contains the code and the form window to print a multiplication table for any number from 1 to12.

Required: In the following table, complete using the necessary code to get the correct output after running the program.

الكود	تشغيل البرنامج
	

```
Dim m, product, NUM As Integer
Dim str As String

NUM = Me.TextBox2.Text

Me.TextBox1.Text = ""
For m = 1 To 12
      = NUM & "x" & m & "="
    product = NUM *
    Me.TextBox1.Text = Me.TextBox1.Text & str & product & vbCrLf
Next
```


1- Str
2- m
3- m

(7) With the help of the code, answer the following questions:

```
For I = 1 To B Step C
    Me.TextBox1.Text = Me.TextBox1.Text & I & vbCrLf
Next
```

A- The purpose of the code: **Display the numbers from 1 to B by increasing C**
B- The name of the counter variable **I**
C- The iterative loop begins with the value **1**
D- The iterative loop ends with the value **B**
E- the value of the increment of counter **C**
F- The purpose of vbCrLf is **to move a new line.**

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(8) The following code is used to input a positive number, and when you press the "odd numbers" button, odd numbers from 1 to the positive number that has been entered is typed, and if you press, "Even numbers" button , odd numbers from 1 to the positive number that has been entered is typed.

الكود	تشغيل البرنامج

`Dim N, i As Integer`
`N = TextBox1.Text`
`ListBox1.Items.Clear()`
 	
`i = 1`
`Do While i <= N`
`  ListBox1.Items.Add(i)`
`  i = i + 2`
`Loop`	

Required:

(1) The loop statement in the program is **Do While … Loop**.

(2) The purpose of the code (I = I + 2) in the line before the last is **Increase the value of the variable (i) by (2) each time**

(3) The purpose of the Loop is: **Return back to the beginning of the loop**.

(4) Select the right choice to determine the nature of each part of the line of code components

ListBox1.Items.Clear ( )

- ListBox1: ○ Control tool ○ Variable
- Items: ○ Constant ○ **Property**
- Clear ( ): ○ **Method** ○ Property

(9)The purpose of the following code is entering a positive number, then the sum of odd numbers is displayed in text box.

```
Dim N, i, sum As Integer
N = TextBox1.Text

i = 1
Do While i <= N
    sum = sum + i
    i = i + 2
Loop

Label3.Text = sum
```

(A)The purpose of the code N = TextBox1.Text is

Assignment the TextBox1 tool to the Variable (N)

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(B) The Loop statement used in the code is:

Do While … Loop.

(C) The loop statement will be implemented as long as

The value of variable (i) is less than or equal to the value of variable (N)

(D) The sum of odd numbers is displayed in the text box when we get to a number larger than the positive one that has been entered in the control tool **TextBox1** and that was assigned to the variable(**N**) .

(10)Tick (✓) in front of the correct statement and a sign (×) in front of the wrong one for each of the following phrase:

No	Question	Answer
1	The **procedure** is a set of commands and instructions that are repeated for specified number of times.	(X)
2	The **procedure** is a set of commands and instructions under a certain name, and when you recall this name, these commands and instruction are implemented.	(√)
3	The purpose of the use of **procedures** is repeating typing a specific code several times in the program.	(X)
4	When we have a specific code that we want to be replicated in more than one place in the class, we use the "**Function**"	(X)
5	The group of Commands and instructions that are placed under a name, when we implement them, they return a value. we call this action " **procedure** ".	(X)
6	The group of Commands and instructions that are placed under a name, when we implement them, they return a value. We call this action " **Function** ".	(√)
7	When we have a specific code that we want to be replicated in more than one place in the class, we use the "**Procedure**".	(√)
8	**Parameters** are used to receive values from outside the **procedure** on recalling it.	(√)
9	When you recall a **procedure** with the name Taxes(0.05), the value between the brackets is called **Argument**.	(√)
10	When you call a **procedure** with the name Taxes(0.05), the word taxes is called **Argument**.	(X)
11	The declaration of a function starts with (**Sub**) and ends with (**End Sub**).	(X)
12	The declaration of a function starts with (**Function**) and ends with (**End Function**).	(√)
13	We resort to the use of the **Function** if our code results in a value we need.	(√)
14	We resort to the use of the **Procedure** if our code results in a value we need.	(X)
15	The **Function** is a set of commands and instructions with a specific name that can take **Parameters**, and return a **parameter**.	(√)
16	The **Function** is a set of commands and instructions with a specific name that can take values, and return a **value**.	(X)
17	The demerit of the language of **VB.Net** is that it allows he programmer to declare other **functions** and **procedures** prepared by him.	(X)

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11: Complete the following table with the assistance of the following code.

```
Sub ShowOddOrEven(ByVal Start As Integer)
    Dim i As Integer
    Label1.Text = ""
    For i = Start To 10 Step 2
        Label1.Text = Label1.Text & " " & i
    Next
End Sub
```

N	Required	Answer
1	Procedure name	**ShowOddOrEven**
2	Parameter was declared with the name … and type …	**Start , Integer**
3	The iterative loop starts from the value ….	**Start**
4	The increment value of the iterative loop equals	**2**
5	When called the procedure to implementation the code start with value ……..	**Start**

12: Complete the following table with the assistance of the following code.

```
Function XXX (ByVal YYY As Integer, ByVal ZZZ As Integer) As Single
        Code
Return RRR
End Function
```

N	Required	Answer
1	Function Name	**XXX**
2	The type of the return value of the function	**Single**
3	The parameters will be used in the code	**YYY , ZZZ**
4	The return value of the function	**RRR**

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Chapter (4)

The first question: Tick (✓) in front of the correct statement and a sign (✖) in front of the wrong one for each of the following phrase

N	Question	Answer
1	Cyber bullying is a deliberately aggressive behavior, using electronic media for harassment, annoyance, disturbance, intimidation or threatening others .	(√)
2	Cyber bullying is done through electronic means, such as social networking sites.	(√)
3	Stealthy-mail is considered a form of Cyber bullying.	(√)
4	Harassment and the threat are of the most important electronic means used in Cyber bulling.	(X)
5	Harassment and blackmailing are forms cyber bulling.	(√)
6	Stealing the person's account in the social networking sites or email is one of the risks that we may be exposed to through such media.	(√)
7	Social networking sites help to meet new people you like to see to develop social relationships.	(X)
8	In line with the rules of safe use. you should put an easy password passage ,for your private e-mail, in order to be able to remember,	(X)
9	E-exception means following a particular person in all means of electronic communication.	(X)
10	Electronic prosecution is intended to send an e-mail carrying a threat and holiday for one or more persons.	(X)

Second: Complete the following table explaining you think of all the sentence of the following:

N	Situation	You think in the light of the rules of safe use
1	Put a password is easy conclusion	**You must choose the word with a high degree of difficulty. It must contain numbers, letters and special characters, and more than eight characters, and must be changed each period of time.**
2	To publish of a person to his real name, address and telephone number through the electronic media.	**Don't publish any private data; Of course, he will have a lot of harm such as exposure to libel, blackmail or identity theft.**
3	Download any programs available to you on the internet	**No, I do not: but she should have made sure of these programs and their sources and followed intellectual property rights to these programs.**
4	The fast angry response, to Cyber bullying many be exposed to him over the internet	**It was an act of haste, and he should have followed the rules of safe use of the internet, "Be careful of sending an email when you are angry".**
5	Delete all messages that have been threatened you in the social media or e-mail	**Avoid deleting cyber bullying messages.**

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Third: Attitudes of life:

(1) A person contributes in one of the social media sites, whenever he communicates with one of the members, or tries to perform a chat or an instant message; he notices no one responds to him.

(A) What happens is a form of **Cyber Bullying** called **Exclusion:**

(B) What do you do to cope with this act

Inform your parent or teacher to handle this situation

(2) Participated in a social media sites, you was surprised a person sarcastically on Egypt and talk about symbols inappropriately.

Select four positive actions from which to respond.

- **Inform those responsible for this person to take action with him.**
- **Do not delete messages from him in order to be evidence of the condemnation of the infringer.**
- **Inform colleagues not to accept friendship.**
- **Warning this person is a repeat of sarcasm on Egypt and its symbols.**

- إبلاغ المسئولين عن هذا الشخص لإتخاذ إجراء معه.
- عدم حذف الرسائل الصادرة منه لكي تكون دليل على إدانة المتعدي.
- إبالغ الزمالاء بعدم قبول صداقته.
- تحذير هذا الشخص من تكرار التهكم على مصر ورموزها.

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موقع الدكتور محمد رزق التعليمي

امسح الباركود بالموبيل لتثبيت التطبيق وتحميل كل الملازم مجانا وبسرعه

MR

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